JANUARY

at the

CALIFORNIA ACADEMY OF SCIENCES

JANUARY MEETING

Date: Friday, January 17, 8:15 p.m.

Place: Morrison Auditorium

Speaker: Edgar T. Jones

Subject: "ALBERTA OUTDOORS"

In this, the second in the series of 1963-1964 Audubon Wildlife films, audiences roam one of the most interesting of Canadian Provinces including the southern section and its rolling plains, the central region of parklands and farming country, and the northern untamed wilderness.

Many different birds and animals of the Province are the stars - moose, elk, the Canada lynx, hordes of bohemian waxwings, pine and evening grosbeaks, and the snowy owl. With the coming of spring, we are witness to the great snow goose migration with 15,000 geese in one field. For one segment dealing with the seldom seen great gray owl, Mr. Jones and an associate spent three years of searching before they successfully discovered two nests and were able to photograph this diminishing species in its natural habitat.

MORRISON PLANETARIUM

"THE STAR OF BETHLEHEM" continues through January 5th.

Beginning January 8, "ORION THE HUNT-ER" - the story of one of the most magnificent constallations of the winter skies, a dust-shrouded region where new stars are born, where a huge red sun pulsates and flickers fitfully, and where stars circle endlessly in the depths of space.

Performances daily at 3:30 p.m., and evening performances, Wednesday through Sunday, at 8:30. Extra matinees on Saturday and Sunday at 2:00 p.m.. The Planetarium is closed on Monday and Tuesday evenings. Admission: Adults, 75¢, Juniors, 40¢.

SPECIAL EXHIBITS

Exhibit of the Month: "THE THREE MOST POPULAR EXHIBITS OF 1963". Main Foyer, Science Museum.

"THE ALASKAN SEA OTTER", photographs and text by Karl W. Kenyon, biologist with the U.S. Fish and Wildlife Service continues in Lovell White Hall through February 15.

"NOBEL EXHIBITION", Hall of Science. (See NEWS AND NOTES).

"SCIENCE IN ACTION"

Thursday nights, 7:30 p.m., KTVU-TV, Channel 2 January 2: "SUPERNOVA", with Guest Scientist Dr. Stirling Colgate, University of California.

January 9: "CHINESE TRANSLATION MACHINE", with Hsien-Wu Chang, IBM Corporation.

January 16: "PRE-COLUMBIAN MUSIC" with Carl Dentzl, Director, Southwest Museum, Los Angeles.

January 23: "CONSUMER TEXTILES" with Dr. Mary Ann Morris, University of California.

January 30: "HORIZON SCANNER" with Dr. E.J. Wilson, Jr., Advanced Technology Laboratories.

NEWS and NOTES

It was a gala day at the Academy on December 10. Officially proclaimed "Nobel Day" by the Mayor of San Francisco, the Academy was the setting for a program and reception sponsored by the Swedish Consulate honoring some of the past winners of the Nobel Prize who now reside in California. The group of distinguished scientists and invited guests assembled in Morrison Auditorium in mid-afternoon for a program of speeches and motion pictures. They were greeted by Dr. A. Starker Leopold, President of the Academy, and by Director George E. Lindsay. As a highlight of the proceedings, the following Nobelists were introduced: Dr. Wendell Stanley, co-winner of the Chemistry prize in 1946; Dr. Edwin M. McMillan, co-winner (with Dr. Glenn Seaborg) for the 1951 prize in chemistry; Drs. Emilio Segre and Owen Chamberlain, co-winners in physics in 1959; Dr. Donald A. Glaser, 1960 prize winner in physics; Dr. Melvin Calvin, winner in chemistry in 1961; and Dr. Robert Hofstadter, co-winner of the 1961 physics prize.

It came as a gratifying surprise when, at the close of the program, Mr. Per Anger, Consul General of Sweden, awarded the Academy the Berzelius Medal. This medal, given to outstanding friends of Sweden, is named in memory of famed Swedish scientist Jons Jakob Berzelius (1779-1848), best known for his contributions in the field of atomic weights, and also the introduction of the present system of chemical formulation.

At the close of the ceremonies, the distinguished company adjourned to inspect an exhibit on the Nobel Prize installed in the Hall

of Science. The display is a retrospective look at the history of the famed Prize and the life of its creator, Alfred Nobel. From there the guests moved to Simson African Hall for a reception.

The aforementioned display will be on view at the Academy until the arrival of "Sweden Week" which takes place in San Francisco in February.

Through action of the Science Council of the Academy, Miss Dolores Cadell of San Francisco has been appointed Library Associate of the J.W. Mailliard, Jr., Library. Miss Cadell, retired head of the San Francisco Public Library, will be particularly concerned with archival material in the Academy's library. The appointment was announced November 15 of last year.

Speaking of the Mailliard Library, Ray Brian, Acting Librarian, wishes it known that he would welcome volunteer assistance for many of the diverse tasks which are demanding attention. Anyone with a genuine interest in books and the workings of a scientific library who might have time on his hands (either part-or full-) should get in touch with Mr. Brian at BAyview 1-5100. Your call will be exceedingly welcome.

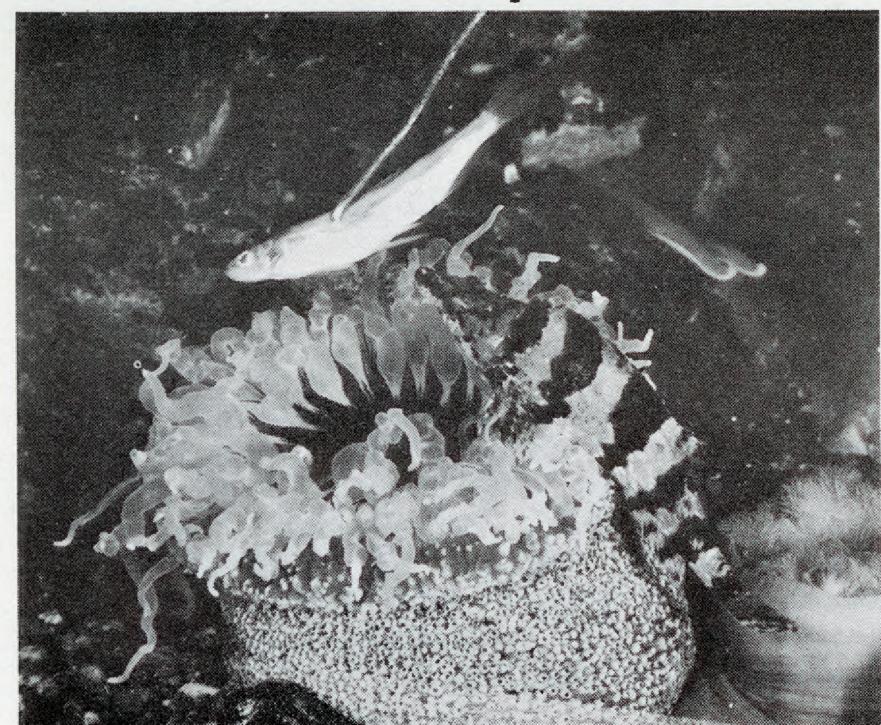
Now under construction in the Academy Instrument Shop is a Foucault pendulum designated for installation at Ege University located in the Bornova section of Izmir, Turkey. This pendulum is one in a series of nine created in the shop, under contract, for various educational organizations.

Currently, Alvin C. Gundred, Superintendent of the Shop, is in Washington, D.C. where he is supervising the installation of a similar instrument in the new Smithsonian Institution.

Mrs. Lillian Dempster, Associate Curator in the Department of Ichthyology, returned from a field trip to Venezuela where she was able to obtain a representative collection of fishes from Lake Maracaibo.

Earlier last year, Mrs. Dempster represented the Academy at the XVI International Congress of Zoology in Washington, D.C.

From the Academy Collections



With the summer influx of tourists now over, the throngs of people in the halls of the Academy buildings and particularly in the Aquarium have thinned out to the point where one may really see the fish tanks. By watching where the crowds accumulate, it is possible to evaluate the displays in terms of visitor interest. High on the list of exhibits are the anemone displays where some visitors have been clocked at remaining fifteen minutes. The crowds increase at the time of the daily 4:30 p.m. feeding.

Each of the 400 anemones has to be fed individually and although this involves nothing more than a long stick with a sharp prong to which a 4inch whitebait or smelt is attached, it does require considerable dexterity to pop the fish into the tentacle span of the anemone. With the giant red and white Telia anemones, the tentacle span may measure 10 inches; but the smaller powderpuffs and others may have a tentacle area of only 1-1/2 or 2 inches. Their feeding takes skill. With the fish finally secured, the tentacles close in, pushing the food to the central gullet and into the primitive digestive tract. After feeding, the anemone usually remains closed for a number of hours.

The microscopic stinging cells in the anemone's tentacles present problems to other living animals. When divers first brought in the giant Telia anemones, the mistake was made of placing some 18-inch jacksmelt in the same tank. Some of them were quickly immobilized by the stinging cells as they swam by the tentacles. The remainder of the jacksmelt were quickly rescued. Yet in this same tank small convict fish (seen at right in the above photo) swim around and through the tentacles, seemingly immune to the stinging cells. The mucous on the convict fish's body probably prevents the tripping of the stinging cell. The beautiful tube anemones apparently carry lethal stinging cells in their long thread-like tentacles, for it was necessary to move the nearby red colonial anemones, Corynactis, after some of them accidentally were killed by the tube anemones.

(Photo by Maurice Giles, CAS).

Earl S. Herald

NEW MEMBERS OF THE ACADEMY

Mr. Kit Jones

Mr. Robert S. Kundert

Mr. James W. MacBride

Miss Ann Pennock Marshall

Dr. Eric Lindroth

Mr. Ernest Linnett

Miss Jeanice Mast

Dr. Henry Mayer

Mr. John MacFarlane

Mr. Bruce McClelland

Dr. Chester A. Moyle

Miss Lucretia Nelson

Dr. William J. Oswald

Mr. W. Duncan Rannie

Miss Anita D. Schaefer

Miss Margaret M. Simpson

Miss Doris Schmiedell

Dr. James R. Sharpe

Mr. William H. Smith

Miss Cynthia H. Stone

Mr. J.L. Strecker

Mr. Emory Strong

Mr. John A. Tubbs

Mrs. Alice G. Waters

Mrs. Alice B. White

Miss Doris Wright

Miss Joyce Munson

Dr. Doris K. Niles

Mr. Charles F. Ott

Mr. James Peters

Mrs. A.G. Rodda

Mr. Allen L. Ryan

Mr. J. Dean Parnell

Mrs. George C. Morris

Miss Nancy J. McAllaster

Mr. Richard L. Newhouse

Regular Membership Mr. Stephen M. Allen Mr. Howard F. Anderson Dr. Milton A. Antipa Mr. Richard C. Beckett Mr. David B. Benner Miss Helen M. Boettner Mr. Daniel Boyd Mr. Nicholas G.K. Boyd III Miss Beryl C. Briggs Mr. Edward Rambo Browne Mr. Everett E. Bryan Miss Dolores Cadell Mrs. Allen L. Chickering Mr. Robert Commer Mr. Dean Converse Mr. Allan V. Cox Dr. John G. Cranfield Mrs. Tammy J. Davis Miss Joan Ludwig DeWinter Mr. Willis Durst, Jr. Mr. Raleigh Ellisen Dr. M.B. Evans Mr. Goscoe O. Farley Mr. Jacob Feldman Mr. Richard Fleming Mr. Harry Frumkin Miss Ida Geary Miss Patricia M. Gold Mr. Jack Guggolz Mrs. Marion Harman Mrs. Ruth Hawksley Mr. Donald K. Henry Mr. Claus Jaeger Dr. Mary Jaros Miss Kathryn Jensen Mrs. Marion J. Johnson

Family Membership Mr. Kris Aaland Mrs. Laura E. Hudd Mr. David W. Allen Dr. Robert H. Irwin Mr. Jon Johnsen Mr. & Mrs. Rex W. Allen Mr. & Mrs. Richard Behrens Mrs. & Mrs. V.R. Johnson Mr. A. Bart Berger Mr. Harry Lee Bright Mr. & Mrs. D.S. Chase Mr & Mrs. E.E. Combs Mr. Donald Cooper Mr. Jerome C. Draper, Jr. Mr. D.R. Drury Mr. Newell F. Ford Mr. & Mrs. Erwin H. Gove Dr. & Mrs. Dale Gross

Mr. Leland H. Jordan Mr. & Mrs. Carl Botenhagen Mr. & Mrs. C.A. Look Mr. & Mrs. J.C. McHugh Mr. John W. Nelson Mr. Chester T. O'Konski Mr. Medrick H. Perra Mrs. R.L. Reenstjerna Rev. Tyron Richards Mr. John Ronchetto Mr. & Mrs. R.W. Solberg Mr. & Mrs. J.F. Spencer Mr. Warren Hadley Mr. & Mrs. R.L. Stone Dr. John F. Hollister Mr. Arturo F. Tudury Mr. & Mrs. David L. Williams

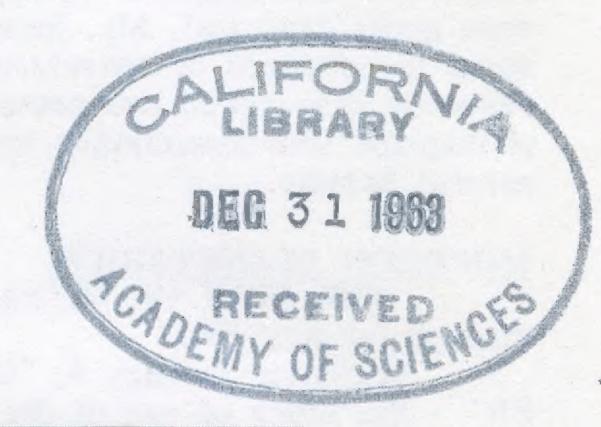
Student Membership

Larry W. McCready

THE CALIFORNIA ACADEMY OF SCIENCES GOLDEN GATE PARK SAN FRANCISCO 18

Open every day of the year 10:00 a.m. to 5:00 p.m. - Admission Free

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